

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002037**Date Inspected:** 12-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 100**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sha Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Mock-ups, OBG Components**Summary of Items Observed:**

The Caltrans Quality Assurance Inspector (QA), M. Paul Stovall, was present at Zhenhua Port Machinery Company (Z. P. M. C.), Changxing Island, Shanghai, China for the purpose of monitoring the fabrication of the SAS/San Francisco/Oakland Bay Bridge.

77-meter Mock-Up, ZPMC, personnel checked the Mock-Up with a laser transit to check the plumbness of the welded pieces, rotated and relocated it, to continue work at other locations.

ZPMC, personnel ground weld numbers: MUSA-SA95-(67 & 66), MUSA-SA95-3, and MUSA-SA95-62.

Welder Xia Yenglin—04882, welded weld number MUA-MA1-D/F-16B, using Welding Procedure Specification (WPS)-B-T-2221-C-U2b-S. The QA Inspector recorded the following WPS variables at various times: 719 amps 31.2 volts; 722 amps, and 31.2 volts.

114-meter Mock-Up-(lower)- Z. P. M. C., Welder, Ji Zhou'ai Jun—048786, and Liu Shouhai—066456, welded MUC-E2-9 and MUC-E2-5, MUC-E2-(5, 6, 9, and 10), were also worked on.

The QA Inspector did a Magnetic Particle Test on Skin B to Skin C—MUC-E2-(25 and 27), 10% and it was found to be in general compliance with the contract documents.

Z. P. M. C., Welder, Dai Lu—048659, welded, weld number, MUSB-MA26-31A, using WPS-B-T-3212-Tc-U5b. This was on a Splice Plate, for the 89-meter Mock-Up. The QA inspector checked and recorded the welding

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parameters that measured 207 amps and 203 amps. WPS-B-T-Tc-U5b, was used. The Welder stopped working approximately 45 minutes later, and a heating pad was placed on the weld.

An access hole was cut in the diaphragm, on the inside diameter, of Skin B to Skin C and the diaphragm.

(Bay 7), Floor Beam (FB)025-01-11, full joint penetration weld, using WPS-B-T-2221-B-L2c-S-1, work is in progress.

Z. P. M. C., Quality Control personnel are checking the flatness between (2) welded plates, on FB022-01-080.

### Summary of Conversations:

No pertinent conversations took place.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Stovall,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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